



5692

## MEDIUM-MU TWIN TRIODE

*Intended for critical industrial applications where 10,000-hour life, extreme uniformity, rigid construction, and exceptional stability are paramount. Within its ratings, the 5692 may be used to replace its receiving-tube counterpart, type 6SN7-GT.*

5692  
SPECIAL  
TUBE RED

### GENERAL DATA

#### Electrical:

Heater, for Unipotential Cathodes:

Voltage. . . . .  $6.3 \pm 5\%$  \* . . . ac or dc volts

Current. . . . . 0.6 . . . . . amp

Direct Interelectrode Capacitances:<sup>o</sup>

	Min.	Av.	Max.	
Triode No.1:				
Grid to Plate. . . . .	3.0	3.5	4.0	$\mu\text{f}$
Grid to Cathode. . . . .	1.8	2.3	2.8	$\mu\text{f}$
Plate to Cathode . . . . .	2.0	2.5	3.0	$\mu\text{f}$

Triode No.2:				
Grid to Plate. . . . .	2.8	3.3	3.8	$\mu\text{f}$
Grid to Cathode. . . . .	2.1	2.6	3.1	$\mu\text{f}$
Plate to Cathode . . . . .	2.2	2.7	3.2	$\mu\text{f}$

Plate of Triode No.1 to				
Plate of Triode No.2 . . . . .	0.27	0.32	0.37	$\mu\text{f}$

\* Heater voltage may deviate  $\pm 10\%$  from rated value, provided such deviation occurs for less than 2% of the operating time.

<sup>o</sup> With no external shield.

#### Mechanical:

Mounting Position. . . . . Any

Maximum Overall Length . . . . . 2-7/8"

Maximum Seated Length. . . . . 2-5/16"

Maximum Diameter . . . . . 1-9/32"

Bulb . . . . . T-9

Base . . . . . Short Intermediate-Shell Octal  
8-Pin, Non-Hygroscopic

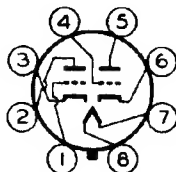
Basing Designation for BOTTOM VIEW . . . . . 8BD

Pin 1-Grid of  
Triode No.2

Pin 2-Plate of  
Triode No.2

Pin 3-Cathode of  
Triode No.2

Pin 4-Grid of  
Triode No.1



Pin 5-Plate of  
Triode No.1

Pin 6-Cathode of  
Triode No.1

Pin 7-Heater

Pin 8-Heater

(continued on next page)

MAR. 15, 1948

TUBE DEPARTMENT  
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

TENTATIVE DATA

5692



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## MEDIUM-MU TWIN TRIODE

## INDUSTRIAL SERVICE

Including applications such as dc amplifiers, audio amplifiers,  
and relaxation oscillators.

Values are for each unit

## Maximum Ratings, Absolute Values:

DC PLATE VOLTAGE . . . . .	275 max.	volts
DC PLATE-SUPPLY VOLTAGE. . . . .	330 max.	volts
GRID VOLTAGE:		
Negative bias range. . . . .	1* min. to 100 max.	volts
Negative peak value. . . . .	200 max.	volts
DC GRID CURRENT. . . . .	2 max.	ma
DC CATHODE CURRENT . . . . .	15 max.	ma
PLATE DISSIPATION. . . . .	1.75 max.	watts
PEAK HEATER-CATHODE VOLTAGE:		
Heater negative with respect to cathode. .	100 max.	volts
Heater positive with respect to cathode. .	100 max.	volts
AMBIENT TEMPERATURE RANGE. . . . .	-55 to +90	°C

\* For resistance-coupled amplifier applications, the negative bias may be as low as 0.5 volt.

## Maximum Circuit Value (for any operating condition):

Grid-Circuit Resistance. . . . .	2 max.	megohms
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## Characteristics and Range Values:

Heater Volts, 6.3; Plate Volts, 250; Grid Volts, -9

	Min.	Av.	Max.	
Heater Current . . . . .	0.55	0.6	0.65	amp
Heater-Cathode Current with heater-cathode voltage of ± 100 volts. . . . .	-	-	5	μamp
Plate Current. . . . .	4.8	6.5	8.2	ma
Difference in Plate Current between triode units . . . . .	-	-	2.0	ma
Plate Current for grid volt- age of -24 volts . . . . .	-	-	15	μamp
Reverse Grid Current . . . . .	-	-	0.2	μamp
Amplification Factor . . . . .	18	20	22	
Plate Resistance . . . . .	-	9100	-	ohms
Transconductance . . . . .	1825	2200	2575	μmhos

## Typical Operation as Resistance-Coupled Amplifier (Each Unit)

See RESISTANCE-COUPLED AMPLIFIER CHART No. 13 at front of  
Receiving Tube Section.

OUTLINE DIMENSIONS for the 5692 are the same  
as those shown for type 5691

MAR. 15, 1948

TUBE DEPARTMENT

TENTATIVE DATA

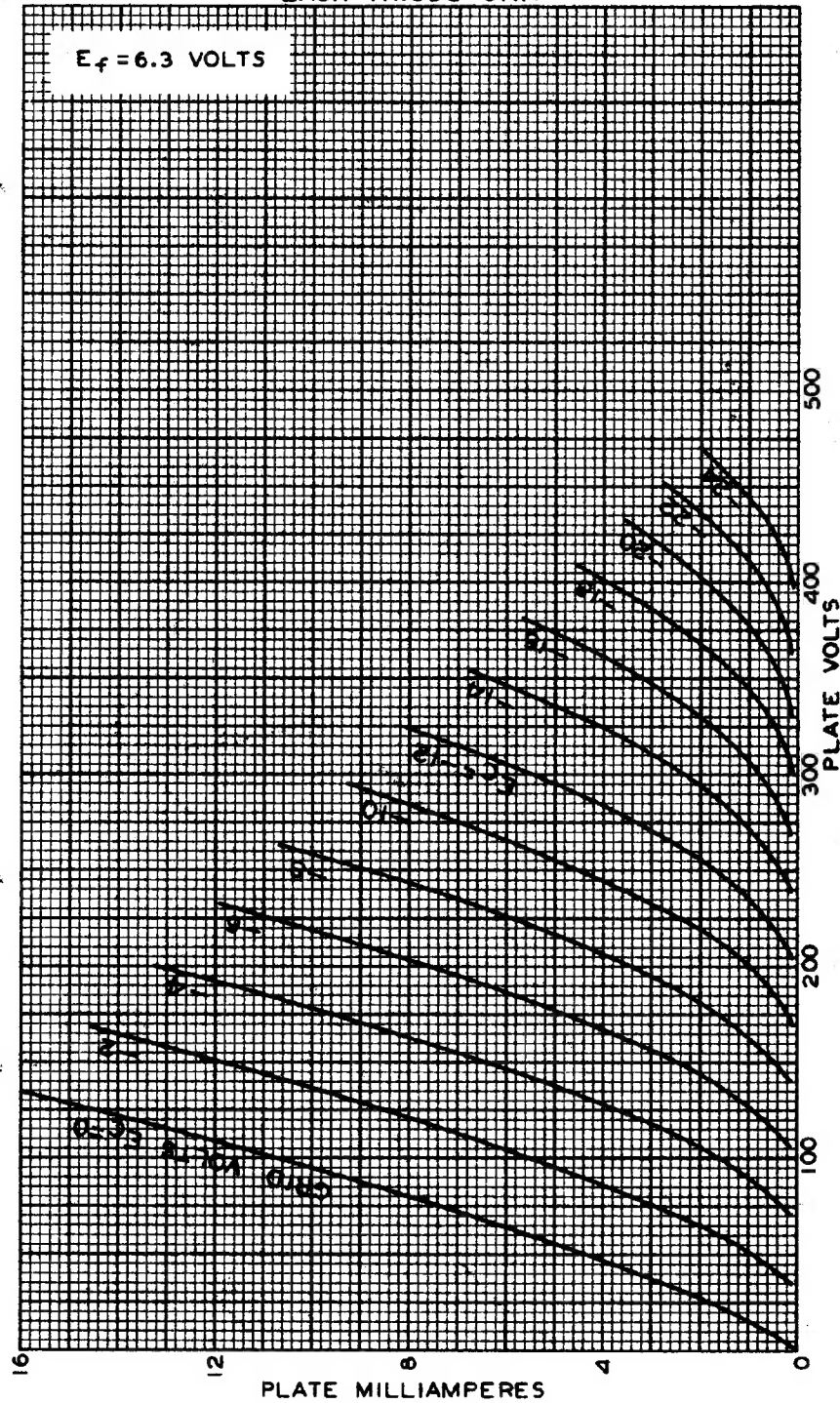
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY



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# AVERAGE PLATE CHARACTERISTICS EACH TRIODE UNIT



FEB. 21, 1941

TUBE DEPARTMENT  
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

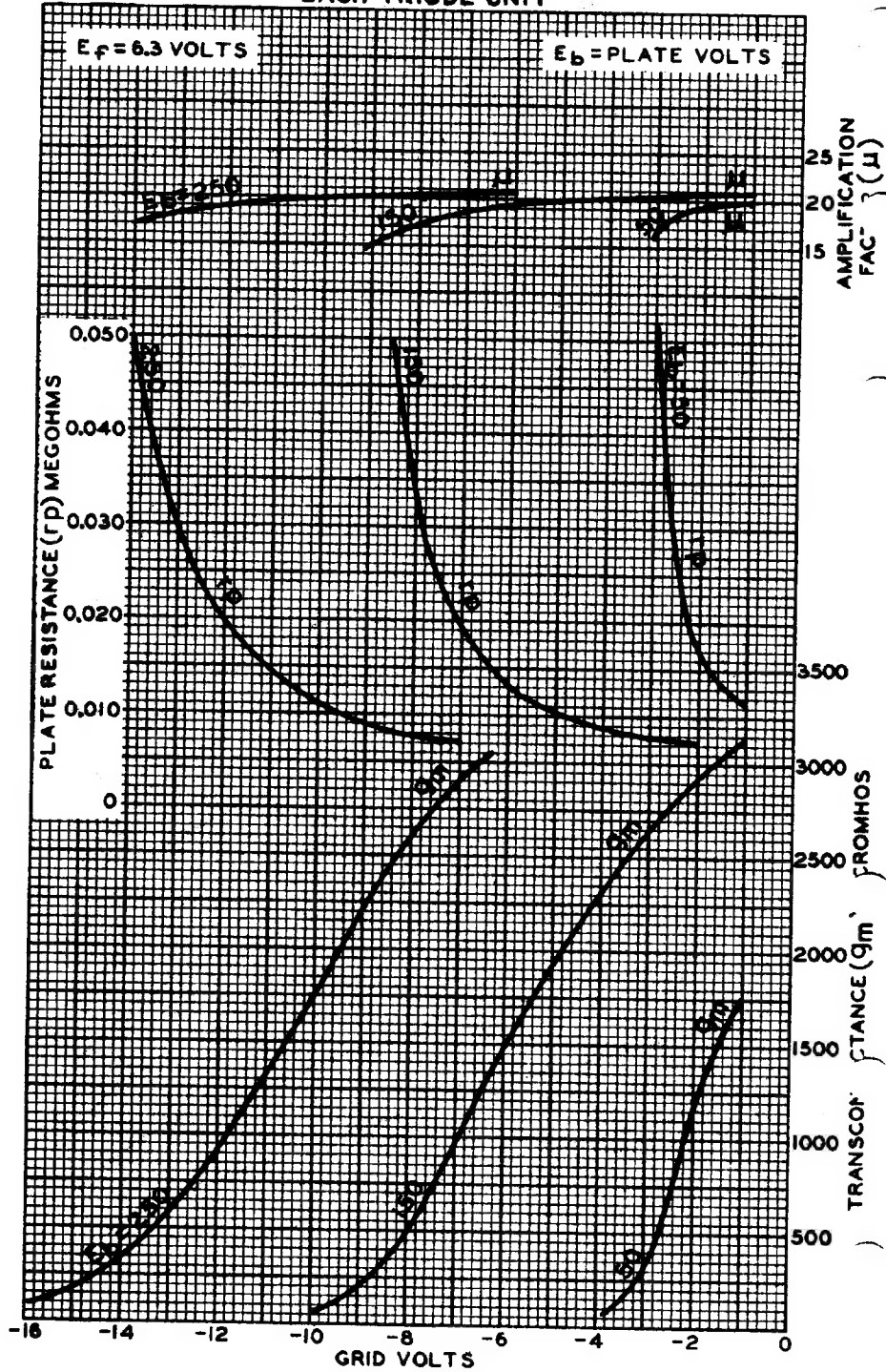
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# AVERAGE CHARACTERISTICS EACH TRIODE UNIT



NOV. 10, 1947

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